

Abstract of the Disclosure

5 A field emission device (FED) and a method for fabricating the FED are provided. The FED includes micro-tips with nano-sized surface features, and a focus gate electrode over a gate electrode, wherein one or more gates of the gate electrode is exposed through a single opening of the focus gate electrode. In the FED, occurrence of arcing is suppressed. Although an arcing occurs in the FED,
10 damage of a cathode and a resistor layer is prevented, so that a higher working voltage can be applied to the anode. Also, due to the micro-tips with nano-sized surface features, the emission current density of the FED increases, so that a high-brightness display can be achieved with the FED. The gate turn-on voltage can be
15 lowered due to the micro-tip as a collection of nano-sized tips, thereby reducing power consumption.